

Notice of Allowability

Application No.

10/626,812

Examiner

Robert S. Tupper

Applicant(s)

CHESSMAN ET AL.

Art Unit

2652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the application filed 7/23/03.
2. ☒ The allowed claim(s) is/are 9-23.
3. ☒ The drawings filed on 09 August 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 7/23/03
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

R.S. Tupper
ROBERT S. TUPPER
PRIMARY EXAMINER
GROUP 2500 *2652*

Art Unit: 2652

1. The following is an examiner's statement of reasons for allowance:

Concerning claim 9, the prior art does not teach or suggest an assembly for securing at least one disk to a hub of a disk drive having a hub with a circumferential groove defined by at least one sloping surface, a disk clamp mounted over the hub, the disk clamp having a central opening defined by at least one angled surface located adjacent the at least one sloping surface, the disk clamp also having upper and lower surfaces, an integral peripheral flange extending radially outward and downward, and a circumferential groove in the upper surface, and a retaining member inserted in a gap between the at least one sloping surface and the at least one angled surface.

Concerning claim 11, the prior art does not teach or suggest an assembly for securing at least one disk to a hub of a disk drive having a hub with a circumferential groove defined by at least one sloping surface, a disk clamp mounted over the hub, the disk clamp having a central opening defined by at least one angled surface located adjacent the at least one sloping surface, the disk clamp also having an annular body with upper and lower surfaces, a peripheral edge, means spaced radially inward from the peripheral edge for allowing the the annular body portion to deflect in response to an axial load applied to it, and a circumferential groove in the upper surface, and a retaining member inserted in a gap between the at least one sloping surface and the at least one angled surface.

Both claims 9 and 11 are read in light of the specification and drawings for definition of the "means" (re claim 11), the locational terms "upper", "lower", "outward", and "downward", and the locations of the listed elements.

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Concerning claim 13, the prior art does not teach or suggest a method of securing one or more disks to a hub of a disk drive comprising providing a disk clamp with a central opening defined by at least one angled surface, providing a hub with a circumferential groove being defined by at least sloping surface, mounting the clamp over the hub so that the angled surface is adjacent the sloping surface, applying an axial load to the clamp, deflecting the clamp in response to the axial load to cause the angled surface to move away from the sloping surface, inserting a retaining member between the angled surface and the angled surface, and releasing the axial load causing the angled surface to move back toward the sloping surface to wedge the retaining member between the angled surface and the angled surface.

Concerning claim 19, the prior art does not teach or suggest a method of securing one or more disks to a hub of a disk drive comprising providing a unitary disk clamp having no screw holes, the clamp having a central opening defined by at least one angled surface and a lower peripheral flange extending radially outward and downward, providing a hub with a circumferential groove, mounting the clamp over the hub, applying an axial load to the clamp, deflecting the clamp in response to the axial load, inserting a retaining member between the angled surface and the circumferential groove, and releasing the axial load causing the angled surface to move back toward the circumferential groove to wedge the retaining member between the clamp and hub.

Both claims 13 and 19 are read in light of the specification and drawings for definition of the locational terms "outward" and "downward", the locations of the listed

elements, and the configuration of the "circumferential groove" required to provide the listed function.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert S. Tupper whose telephone number is 571-272-7581. The examiner can normally be reached on Mon - Fri, 6:30 AM - 4:00 PM (first Fri off).

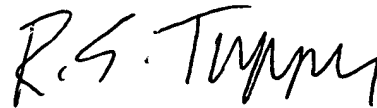
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on 571-272-7579. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read "R.S. Tupper". The signature is written in a cursive, slightly slanted style.

Robert S Tupper
Primary Examiner
Art Unit 2652

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